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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,315	03/31/2004	Mark A. Boerger	CM05922J	5177

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MOTOROLA, INC.
8000 West Sunrise Boulevard
Room 1610
Plantation, FL 33322-9947

EXAMINER

DOAN, TRANG T

ART UNIT	PAPER NUMBER
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2131

MAIL DATE	DELIVERY MODE
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06/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/814,315	Applicant(s) BOERGER, MARK A.	
	Examiner TRANG DOAN	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/03/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-13 are pending for consideration.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by PSWN ("Introduction to Encryption Key Management for Public Safety Radio Systems", 2001) (hereinafter PSWN).

Regarding claim 1, PSWN discloses an encryption key interface system comprising: a universal asynchronous receiver transmitter (UART) peripheral for communicating with a key variable loader (KVL) through at least one communications link (PSWN: See page 5, section 3.2 "Key Distribution" and page 6, first paragraph: encryption key is inserted ("filled") into each radio with key variable loader (KVL) which must be physically connected to each subscriber unit); a driver application associated with the UART peripheral for receiving and transmitting commands to the KVL (PSWN: See page 5, section 3.2 "Key Distribution" and page 6, first paragraph); and wherein the driver application operates to communicate key command information to the KVL

without the use of a timer peripheral (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 2, PSWN further discloses comprising: a key management application for communication with the driver application for managing the key management information (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph).

Regarding claim 3, PSWN further discloses comprising: a general purpose input output (GPIO) peripheral for communicating with the KVL to detect when the KVL is connected with the interface (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 4, PSWN further discloses comprising: a KVL detection application for managing operation of the GPIO peripheral (PSWN: page 9, second and third paragraph).

Regarding claim 5, PSWN further discloses wherein the UART peripheral and the GPIO peripheral communicate with the KVL over separate data links (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph).

Regarding claim 6, PSWN discloses an encryption key interface incorporated within an electronic device for communicating with a key variable loader (KVL) comprising: a universal asynchronous receiver transmitter (UART) peripheral for transmitting and receiving key commands from the KVL (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph);

a KVL driver application for communicating command information to the UART peripheral; a KVL management application operating with the KVL driver application for interpreting key command data from the KVL (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph); and wherein the KVL driver operates without a timer peripheral enabling the UART peripheral to utilize parity error information to validate communication with the KVL (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph).

Regarding claim 7, PSWN further discloses comprising: a general purpose input output peripheral operating with a KVL detection application for detecting when a KVL is initiating communication with the electronic device (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 8, PSWN further discloses wherein the UART peripheral and GPIO peripheral communicate with the KVL over separate communications links (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 9, PSWN discloses a method for using an encryption key interface for communicating key encryption information from a variable key loader (KVL) to an electronic device comprising the steps of: detecting a first detection signal at a universal asynchronous receiver transmitter (UART) within the electronic device (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph); transmitting data from the KVL to the UART (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph); transmitting a second detection signal from the UART to a KVL application when the UART detects a

receive data byte (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph); transmitting a third detection signal from the UART to the KVL application indicating all data has been received (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph); and transmitting a fourth detection signal from the UART to a KVL link layer application for sending subsequent data until all data has been transmitted by the UART (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph).

Regarding claim 10, PSWN further discloses wherein the first detection signal is a break detect indicating a unique KVL signature (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 11, PSWN further discloses wherein the second detection signal is a receive data interrupt command indicating to the UART that data has been transmitted from the KVL (PSWN: See page 5, section 3.2 “Key Distribution”).

Regarding claim 12, PSWN further discloses wherein the third detection signal is idle pattern detect indicating a predetermined number of idle byte times have been received by the UART (PSWN: See page 5, section 3.2 “Key Distribution” and page 6, first paragraph).

Regarding claim 13, PSWN further discloses wherein the fourth detection signal is idle pattern detect indicating to continue transmitting another byte in the response message (PSWN: See page 5, section 3.2 “Key Distribution”, page 6, first paragraph and page 9, second and third paragraph).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRANG DOAN whose telephone number is (571)272-0740. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Trang Doan/
Examiner, Art Unit 2131
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2131